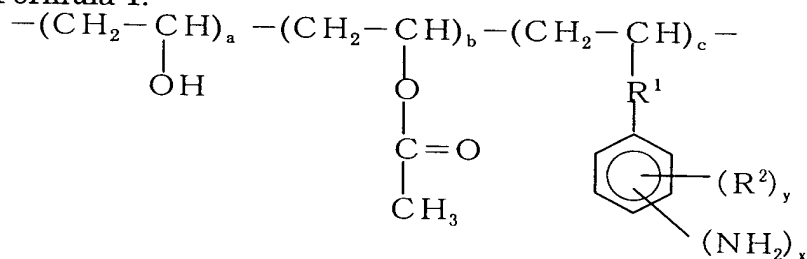


## ABSTRACT OF THE DISCLOSURE

The present invention provides a composite reverse osmosis membrane as a polyamide membrane including a side chain amino group such as a residue of a polyvinyl alcohol-based amine compound represented by Formula 1. Such a membrane can remove organic impurities under a low pressure, providing an economical method for removal of impurities. An aqueous solution including a polyvinyl alcohol-based amine compound having a side chain amino group represented by Formula 1 is applied on a polysulfone-based ultrafiltration membrane as a microporous support. Next, trimesic acid chloride solution is applied causing interfacial polycondensation, which generates a reverse osmosis membrane. When this composite reverse osmosis membrane is evaluated by using a pH 6.5 aqueous solution including 500mg/l of sodium chloride at an operation pressure of 5kg/cm<sup>2</sup> and at a temperature of 25°C, the permeable flux is at least 1.5m<sup>3</sup>/m<sup>2</sup>·d, and the salt rejection is 80% or less.

Formula 1:



wherein  $0 < a$ ,  $0 \leq b$ ,  $2 < c$ ,  $1 \leq x \leq 5$ ,  $0 \leq y \leq 4$ ;  $R^1$  is at least one group selected from the group consisting of an ether group, an alkylene group and an ester group; and  $R^2$  is at least one group selected from the group consisting of an alkyl group and a halogen group.